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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,766	05/31/2001	Makoto Fujiwara	60188-075	5700

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EXAMINER
POLTORAK, PIOTR

ART UNIT	PAPER NUMBER
2134	

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/867,766	FUJIWARA, MAKOTO
	Examiner	Art Unit	
	Peter Poltorak	2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 May 2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 March 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1. The Amendment, and remarks therein, received on 5/15/06 have been entered and carefully considered.

Response to Amendment

2. The Information Disclosure Statement received on 4/7/06 has been considered. Additionally, per applicant's request a copy of earlier considered IDS received on 5/31/01 is submitted with this Office Action to the applicant.

3. The replacement of Fig. 4 submitted 3/28/05 is accepted. However, the purpose of a new non labeled figure submitted on 5/15/06 that illustrates the invention and the prior art (next to each other), and some text on the bottom of the page ("1. Less wiring is required for the A-type ...) is not understood. It is not clear, whether the figure is to be considered as new/additional drawings, the specification or whether it is for informational purposes only. Applicant is requested to clarify the matter.

Applicant arguments have been carefully considered but found not persuasive.

4. Applicant arguments are directed towards the limitation: "wherein the plural redundancy check data and each of the corresponding plural confidential data are stored at mutually different addresses on the ROM". Applicant contests the art of record suggesting that the exercised interpretation of the art is: "the same address can be interpreted as different address". Applicant, also provides an example of a house stating that "although the house has different locations therein (e.g. bedroom, bathroom, kitchen, etc.), all those locations are designated with the same address".

The examiner points out that Hartung's disclosure should not be interpreted "the same address can be interpreted as different address". As clearly disclosed by Hartung et al. "the address base of data storage unit 10 for each block of data begins at a reference address for a predetermined addressable data storage register as at 20 and also denominated as a storage address SX. The 4096 byte **data block is stored** in registers represented by the **address space 21**. Error detection for ensuring data integrity includes a CRC residues stored in **registers 22 ...** and represented **as address 23**" (Hartung et al., col. 3 lines 27-35).

It is clear from the disclosure the house example, as cited by applicant, is not analogous. No letters are addressed to a bathroom, for example.

If a housing address is to be consider, one should examine a mail to be delivered to a house, e.g. present in Washington D.C. on 4096 NW street. The mere knowledge of the street would not allow mail to be correctly delivered to a recipient. An additional number that represents a house unit would be needed. Furthermore, one could make even more subtle point. Consider that the house on 4096 NW street is an apartment complex. The street number is not a full address of a recipient. The apartment number would have to be added in order to clearly define the address of the prospective recipient.

5. On page 3 applicant refers to a telephone interview, wherein the examiner suggested that, as cited by applicant, "assuming Hartung et al. does not disclose the alleged plural redundancy check data and each of the corresponding plural

confidential data being stored at mutual different address on the ROM, such a

configuration would have been obvious in view of currently uncited prior art".

Applicant argues that based on the discussion, a new non-final Office Action should

be issued.

The examiner reminds applicant that during the interview the agreement regarding

Hartung et al.'s teaching addressing claims was not reached. The examiner regrets

any misunderstanding and reminds applicant that the examiner's statement

regarding storing data in different location as an obvious variation was only to advise

applicant on the examiner's view of patentability of the claim limitation.

As a result, the request of reopening prosecution is respectfully denied.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1 and 5 remain rejected under 35 U.S.C. 103(a) as being unpatentable over

Hartung et al. (U.S. Patent 4438512) in view of Admitted Prior Art (APA) and further

in view of Milios et al. (U.S. Patent No. 5860099).

7. As per claim 1 *Hartung et al.* teach a data storage unit 10 that stores the plurality of

    data and plurality of CRCs *(col. 3 lines 41-43).*

    This reads on a storage data unit for storing data thereon address by address, and

    on a storage device for storing plural redundancy check data (CRC) address by

    address.

    In Fig. 2 and col. 3 lines 68- col. 4 line 1 *Hartung et al.* teach data with a

    corresponding CRC and it is inherent that a CRC is derived by performing a

    predetermined calculation on the corresponding data.

    Hartung et al. teach a CRC generator and compare circuits/programs that result in a

    data error being detected *(col. 4 lines 33-36 and 55-col 5line 29).*

    This reads on a tester that includes a checker and comparing the checker

    calculation with each of the corresponding plural CRC data that is stored in the

    storage device address by address.

    Although, *Hartung et al.* does not explicitly teach that the checker performs the same

    calculation as the predetermine calculation on each of the plural data in order to

    establish data integrity CRC must be calculated in the same manner so that the

    result is the same for each of the calculation on the same data.

8. *Hartung et al.* do not teach that the storage is ROM and do not explicitly teach that

    the plurality of data stored in the ROM is confidential data.

    Admitted Prior Art (APA) teaches a ROM for storing plural confidential data thereon

    address by address *(Fig. 4 and the specification pg. 1).*

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement *Hartung et al.'s* invention into the known ROM as taught by *APA*. One of ordinary skill in the art would have been motivated to perform such a modification in order to ensure integrity of the confidential data.

9. CRC is stored within the data storage unit *(Hartung et al. Fig. 2)* and each of the plural CRCs and the plural confidential data are stored at mutually different address *(Fig. 2 and col. 3 lines 38-55)*, where *(claim 4)* each of the plural confidential data is stored at certain data bit positions of an address and CRC at remaining data bit positions of the same address *(Fig. 4)*.

10. *Milios et al.* teach an integrated circuit comprising ROM, wherein ROM data can be read only from an internal circuit *(Milios et al., Fig. 1, col. 3 lines 37-62)*.
It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to configure *Hartung et al.* in view of *APA* invention so that the ROM data can be read only from an internal circuit as taught by *Milios et al.* One of ordinary skill in the art would have been motivated to perform such a modification in order to protect data from unauthorized reading *(Milios et al., col. 2 lines 4-51)*.

11. Claim 5 is substantially equivalent to claim 1; therefore claim 5 is similarly rejected.

12. Claims 1 and 5 remain rejected under 35 U.S.C. 103(a) as being unpatentable over *Hartung et al. (U.S. Patent 4438512)* in view *Katsuta (U.S. Patent 5671394)* and further in view of *Milios et al. (U.S. Patent No. 5860099)*.

13. As per claim 1 *Hartung et al.* teach a data storage unit 10 that stores the plurality of

data and plurality of CRCs *(col. 3 lines 41-43).*

This reads on a storage data unit for storing data thereon address by address, and

on a storage device for storing plural redundancy check data (CRC) address by

address.

Fig. 2 and col. 3 lines 68- col. 4 line 1 *Hartung et al.* teach data with a corresponding

CRC and it is inherent that a CRC is derived by performing a predetermined

calculation on the corresponding data.

Hartung et al. teach a CRC generator and compare circuits/programs that result in a

data error being detected *(col. 4 lines 33-36 and 55-col 5line 29).*

This reads on a tester that includes a checker and comparing the checker

calculation with each of the corresponding plural CRC data that is stored in the

storage device address by address.

Although, *Hartung et al.* does not explicitly teach that the checker performs the same

calculation as the predetermine calculation on each of the plural data in order to

establish data integrity CRC must be calculated in the same manner so that the

result is the same for each of the calculation on the same data.

14. *Hartung et al.* do not teach that the storage is ROM and do not explicitly teach that

the plurality of data stored in the ROM is confidential data.

Katsuta teach a ROM for storing plural confidential data thereon address by address

(Fig. 3 and col. col. 8 lines 42-44).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement *Hartung et al.'s* invention into the ROM as taught by *Katsuta*. One of ordinary skill in the art would have been motivated to perform such a modification in order to ensure integrity of the confidential data.

15. CRC is stored within the data storage unit *(Hartung et al. Fig. 2)* and each of the plural CRCs and the plural confidential data are stored at mutually different address *(Fig. 2 and col. 3 lines 38-55),* where *(claim 4)* each of the plural confidential data is stored at certain data bit positions of an address and CRC at remaining data bit positions of the same address *(Fig. 4).*

16. *Hartung et al.* in view of *Katsuta* do not explicitly teach that the confidential data can be read only from an internal circuit inside of the integrated circuit.
Milios et al. teach an integrated circuit comprising ROM, wherein ROM data can be read only from an internal circuit *(Milios et al., Fig. 1, col. 3 lines 37-62).*
It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to configure *Hartung et al.* in view of *Katsuta* invention so that the ROM data can be read only from an internal circuit as taught by *Milios et al.* One of ordinary skill in the art would have been motivated to perform such a modification in order to protect data from unauthorized reading *(Milios et al., col. 2 lines 4-51).*

17. Claim 5 is substantially equivalent to claim 1; therefore claim 5 is similarly rejected.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571) 272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis Jacques can be reached on (571) 272-6962. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

8/2/6

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